IN THE SPECIFICATION

Please replace the originally filed title of the present application with the following substitute title:

--- PATH SETTING METHOD FOR NETWORK STATIONS---

Please amend the paragraph on page 1, lines 12-15 as follows:

---In order to transmit and receive communication signals between the respective nodes of a base or parent station, a relay station and a child station in a network, it is necessary ~~required~~ to set a path according to the type of network, the transmission quality on a transmission line interconnecting ~~between~~ the nodes, and other factors ~~factor~~.---

Please amend the paragraph on page 2, lines 1-13 as follows:

---In a flexible and logical network free from physical factors (VLAN: Virtual Local Area Network), a technique for adding a new user terminal thereto is described in Japanese Patent Laid-Open Publication No. 2002-204247. This publication describes a VLAN information registration system in a VLAN-based network, which comprises: means for allowing a given user-information item required for connecting to the network to be entered at the initiative of a user and then automatically generating user-information management data[[;]]. The VLAN information registration system further comprises means for converting user registration information to VLAN information, the user registration information being automatically generated by the user-information management data automatic generation means ~~to VLAN information~~[[;]]. The VLAN information registration system further comprises means for automatically generating a correspondence table between the VLAN information converted by the conversion means and a MAC (Media Access Control) address of a user terminal[[;]]. The VLAN information registration system further comprises means for allowing the correspondence table generated by the corresponding-table automatic generation means to be updated in a URT (User Registration Tool)[[;]] and means for retrieving registered user information and displaying necessary information on an administrator screen.---

Please amend the paragraph on page 9, lines 9-29 as follows:

---In ~~cased~~ a case where a child station is newly added to the network, the above path setting method may further include ~~the steps of~~: allowing the child station to transmit the basic-information notification signal to the network by means of a broadcast[[;]]. The path setting method further includes allowing, in response to receiving the basic-information notification signal from the child station, the relay station to return the basic-information notification signal containing the basic information of its own station to the child station[[;]]. The path setting method further includes allowing, in response to receiving the basic-information notification signal returned from the relay station, the child station to detect a receiving state and calculate a transmission quality on a transmission line interconnecting with the relay station which has returned the basic-information notification signal, in accordance with the receiving state[[;]]. The path setting method further includes allowing the child station to create or update a receiving-environment table correlating the basic information contained in the basic-information notification signal returned from the relay station to the transmission quality on the transmission line interconnecting with the relay station which has returned the basic-information notification signal, and store the created or updated receiving-environment table therein[[;]]. The path setting method further includes allowing the child station to refer to the transmission quality in the receiving-environment table, and transmit a receiving-environment-table communication signal containing the receiving-environment table of its own station to the parent station through the transmission line having the best transmission quality determined by the reference result[[;]]. The path setting method further includes ~~and~~ allowing, in response to receiving the receiving-environment-table communication signal from the child station, the parent station to set a path to

the child station in accordance with the path used for transmitting the receiving-environment-table communication signal, and transmit the set path to the child station.---

Please amend the paragraph on page 12, lines 5-7 as follows:

---With reference to the drawings, an embodiment of the present invention will now be described. In the figures, ~~it means that~~ components or elements defined by a common reference numeral are equivalent to each other, and duplicate descriptions will be omitted.---

Please amend the paragraph on page 12, lines 12-15 as follows:

---FIG. 1 is a block diagram showing the configuration of the network according to ~~the~~ an embodiment of the present application. FIG. 2 is a block diagram showing the configuration of a relay station. FIG. 3 is a block diagram showing the configuration of a parent station. FIG. 4 is a block diagram showing the configuration of a child station.---

Please amend the paragraph on page 12, line 28 to page 13, line 13, as follows:

---The parent station 11 ~~station11~~, the relay stations 12 and the transmission line 14 serve as main lines of the network 10, wherein the parent ~~patent~~ station 11 and the relay station a 12-a are interconnected by the transmission line 14-xa, the parent ~~patent~~ station 11 and the relay station b 12-b being interconnected by the transmission line 14-xb, the relay station a 12-a and the relay station b 12-b are interconnected by the transmission line 14-ab, the relay station a 12-a and the relay station c 12-c being interconnected by the transmission line 14-ac, the relay station b 12-b and the relay station c 12-c being interconnected by the transmission line 14-bc, the relay station b 12-b and the relay station d 12-d being interconnected by the transmission line 14-bd, the relay station b 12-b and the relay station e 12-e being interconnected by the transmission line 14-be, the relay station c 12-c and the relay station d 12-d being interconnected by the transmission line 14-cd, the relay station c 12-c and the relay station e 12-e being interconnected by the transmission line 14-ce, the relay station c 12-c and the relay station f 12-f being interconnected by the transmission line 14-cf, the relay station d 12-d and the relay station e 12-e being interconnected by the transmission line 14-de, and the relay station e 12-e and the relay station f 12-f being interconnected by the transmission line 14-ef.---

Please amend the paragraph on page 15, lines 3-9, as follows:

---While this embodiment employs a PLR (packet loss rate) value as an index of the transmission quality, any other suitable index, such as a receiving intensity itself of a received signal, may be used. The PLR value is calculated by the following formula 1 based on a receiving intensity P and a packet length L of the received signal, and a communication rate R of the transmission line:

$$PLR = \alpha \times P + \beta \times L \times R \times Ps \qquad (1)$$

[[,]] wherein each of $\alpha$ and $\beta$ is a constant number, and Ps is the ratio of packets from which ~~whose~~ data could be normally extracted, to a total quantity of ~~the entire~~ received packets.---

Please amend the paragraph from page 16, line 24 to page 17, line 1, as follows:

---The superframe cycle herein means a communication frame configured by forming superframes each consisting of a ~~an~~ downlink time slot for performing a downlink communication, an uplink time slot for performing an uplink communication, and a transmission-request-acceptance time slot for accepting a transmission request from the child station requesting ~~for~~ initiation of a transmission, with respect to each of given network-topology units, and forming these superframes as an ~~a~~ embedded or nested structure while correlating them to the network topology.---

Please amend the paragraph on page 20, lines 4-20, as follows:

---The basic information in this embodiment consists of a device type, a MAC address, the setting status of a path relative to the parent station 11 (hereinafter referred to as "path-setting status"), and a network ID. The device type means either one of the parent station 11, the relay station 12 and the child station 13. For example, in the basic-information ~~basis-information~~ notification signal, "BST", "RPT" and "RMT" are used as identifiers indicative of the parent station 11, the relay station 12 and the child station 13, respectively. The path-setting status is indicated by ~~means either~~ one of "non-completion of path setting", "completion of temporary-path setting" and "completion of fixed-path setting". This path-setting status is selectively determined by referring to the path discrimination flag in the path storage section 223, 323. For example, in the basic-information ~~basis-information~~ notification signal, "PERM", "TEMP" and "VAC" are used as identifiers indicative of the "completion of fixed-path setting", the "completion of temporary-path setting" and the "non-completion of path setting", respectively. The basic-information processing section 211 refers to the respective stored contents of the MAC-address storage section 211, the ID storage section 222 and the path storage section 323 to generate the basic-information notification signal. The device type may be written directly in the control program itself for the relay station 12. Alternatively, the storage unit 22 may be provided with a type storage section for storing the device type.---

Please amend the sentence on page 35, lines 2-9, as follows:

---The the parent station 11 transmits a fixed-path notification signal containing the set fixed-path to the child station 13. While a fixed-path may be re-calculated in accordance with an updated transmission-quality table according to the aforementioned algorithm[[,]] and set ~~the re-calculated fixed-path~~ to include an additional child station 13, it is only necessary to set ~~as a fixed-path~~ a path to the relay station 12 having the highest PLR value relative to the additional child station 13[[,]]. Alternatively, ~~or~~ a communication route may be used for transmitting/forwarding the receiving-environment/basic-information notification signal of the child station 13[[,]]. The ~~because the~~ addition of the child station 13 does ~~is~~ not ~~the~~ change ~~in~~ main lines of the network 10 including ~~consisting of~~ the parent station 11, the relay stations 12 and the transmission line (distribution line) 14. According to the above operation of setting a fixed-path to an additional child station 13, a fixed-path can be quickly set, and a calculation load in the parent station 11 can be reduced.---